## (19) World Intellectual Property Organization

International Bureau





(43) International Publication Date 16 December 2004 (16.12.2004)

## (10) International Publication Number WO 2004/108961 A1

(51) International Patent Classification<sup>7</sup>: C12Q 1/68, G01N 33/574, C12N 15/11, A01K 67/027, A61K 35/00

(21) International Application Number:

PCT/IT2004/000325

(22) International Filing Date:

3 June 2004 (03.06.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

RM2003A000283

6 June 2003 (06.06.2003)

(71) Applicants (for all designated States except US): AR-DUINI, Arduino [IT/IT]; Via della Bonifica n.48, I-65100 Pescara PE (IT). PATRIZI, Andrea [IT/IT]; Via Tribuna di Tor Dè Specchi 18/a, I-00100 Roma RM (IT).

- (72) Inventors; and
- (75) Inventors/Applicants (for US only): BEGUINOT, Francesco [IT/IT]; Via Russon n°29, I-80100 Napoli NA (IT). MIELE, Claudia [IT/IT]; Via Po n°25, I-80100 Napoli NA (IT). FORMISANO, Pietro [IT/IT]; Via Bagnara nº6, I-80055 Portici NA (IT).
- (74) Agent: SPADARO, Marco et al.; Cavattoni-Raimondi, Viale dei Parioli, 160, I-00197 Roma RM (IT).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

## Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: THERAPEUTIC AND DIAGNOSTIC MEANS FOR PAPILLOMAS AND OTHER DISEASES INVOLVING PED/PEA-15

(57) Abstract: The present invention discloses diagnostic methods and means, as well as medicaments in diagnosis, prognosis and therapy of diseases where PED/PEA-15 plays an etiopathogenetic role, in particular papilloma and diabetes. Said methods are based on the determination of PED/PEA-15 levels and the medicaments are based on antisense oligonucleotides. A non-human transgenic animal, expressing high PED/PEA-15 levels, is also disclosed, being it useful as a model for the study of said diseases and evaluation of their therapies.